

ABSTRACT OF THE DISCLOSURE

The present invention provides diamond tools, and a method for the formation thereof, using CVD techniques. In one aspect, a mold is provided which has an interface surface configured to inversely match a configuration intended for the working surface of a diamond layer in a tool. After the mold is provided, various CVD techniques may be used to deposit diamond layers upon the diamond interface surface of the mold. Following diamond deposition upon the diamond interface surface, the mold may be removed by various means, such as chemical etching, or the mold may be left intact for certain applications, such as SAW filters. Thus, the working surface of the diamond receives a shape which inversely corresponds to the configuration of the mold's diamond interface surface. The diamond layer may then be incorporated into a tool, if such incorporation has not yet taken place.